

PRODUCT DESCRIPTION DOCUMENT

Experimental Tropical Cyclone Hazards Graphics

APPROVED: //signed// **Date: May 26, 2006**
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Part I - Mission Connection

- a. Product Description - The Tropical Cyclone Hazards Graphics is an experimental, internet-based, product suite consisting of four primary graphics: wind, tornado, coastal flood, and inland flood. These WFO-generated graphics provide qualitative forecasts for the primary tropical cyclone hazards based on the track, intensity, and uncertainties in the official forecasts from the Tropical Prediction Center (TPC), Storm Prediction Center, and Hydrometeorological Prediction Center. In a new era marked by digital and probabilistic forecasts, the hazards graphics are provided to benefit users with local products tailored by the wide-ranging knowledge and experience of the local WFO for their area of responsibility.
- b. Purpose – Customers have requested additional tropical cyclone graphics to supplement the text products provided by WFOs. In addition, the hazards graphics will help to emphasize the wide-ranging impacts of tropical cyclones, particularly for areas away from the immediate coastline. Through the initial experimental period from June 15, 2006 – November 15, 2006, the intent is to receive input from users to determine the benefit and usefulness of the product and the product formats.
- c. Audience - The general public is the primary target audience. However, we expect the product will be widely used by federal, state, and local government agencies; state and local emergency managers; and media.
- d. Presentation Format – Graphical products will be displayed on coastal WFO web sites in Eastern and Southern Regions as follows:

Wakefield, Morehead City, Charleston SC, Corpus Christi. These WFOs will provide Impacts Graphics for each of the four hazards.

Melbourne, Miami, Key West. These WFOs will provide Threat Graphics for each of the four hazards, plus an additional graphic for seas. Additionally, the WFOs will provide Wind Risk Graphics for Tropical Storm-force winds, Strong Tropical Storm-force winds, and Hurricane-force winds.

- e. Feedback Method - Continuous feedback is available via the following web pages:

For the Impacts Graphics:

<http://www.weather.gov/survey/nws-survey.php?code=TCIG>

For the Threat Graphics:

<http://www.weather.gov/survey/nws-survey/php?code=TCTG>

For the Wind Risk Graphics:

<http://www.weather.gov/survey/nws-survey/php?code=TCRG>

Technical and policy questions may be addressed to:

National Weather Service
Attn: Timothy Schott
W/OS21
1325 East West Highway
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or e-mail to: timothy.schott@noaa.gov

Part II – Technical Description

- a. Format & Science Basis - The products are based on the official forecasts provided by WFOs, in association with official forecasts and model guidance provided by the National Centers for Environmental Prediction. The graphics will generally provide a resolution down to the county level.

The Impacts Graphics provide an “at-a-glance summary” for the forecast, cumulative impacts for each hazard. The Impacts scale ranges from None-Low-Moderate-High-Extreme.

The Threat Graphics provide an “at-a-glance” summary for the maximum level of threat using an index ranging from 0, non-threatening, to 5, extreme. The product suite is designed to motivate less-sophisticated users to action regarding preparedness activities, while helping to prevent information paralysis. For more sophisticated users, this product serves as an excellent starting point for critical decision-making and is a coherent briefing tool.

The Wind Risk Graphics use an index ranging from Low-Moderate-High. These graphics are targeted for decision-makers who have sensitivity to certain critical wind speed thresholds. The products are based on the official cumulative wind speed probabilities for tropical storm-force winds (39 mph); strong tropical storm-force winds (58 mph); and hurricane-force winds (74 mph).

- b. Product Availability - These products will be provided by participating coastal WFOs when tropical cyclone watches and warnings are in effect for their respective County Warning Area. That is, the product will generally commence and cease when the WFO’s Hurricane Local Statements commence and cease.

A static web page providing example and comprehensive product descriptions is available online at:

<http://www.weather.gov/os/tropical/hazards.htm>

- c. Additional Information

A full description of other NWS Tropical Cyclone Weather Services Program Products is provided in NWSI 10-601, which is available online at:

<http://www.nws.noaa.gov/directives/sym/pd01006001curr.pdf>